

ORIGINAL
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**U.S. EPA REGION III
Analytical Services & Quality Assurance Branch
Fort Meade, Maryland**

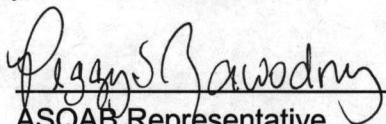
**ASQAB LABORATORY REPORT
FINAL DATA**

NEW RIVER AMMUNITION STORAGE

**Lab Request #: REQ04121
Request Form #: DAS R31860**

Report prepared on: May 17, 2004

Approval for release:


ASQAB Representative

Site contact(s): Bob Thomson (3HS13)

(b) (4)

SITE NAME: NEW RIVER AMMUNITION STORAGE

LAB REQUEST # REQ04121

SAMPLE DESCRIPTIONS

<u>Sample #</u>	<u>Station</u>	<u>Description</u>	<u>Matrix</u>	<u>Type</u>	<u>End Collection</u> <u>Date</u> <u>Time</u>
04042713	RB	RB	Aqueous Blank	GRAB	04/20/2004 10:10
04042714	SW1	SW1	Surface Water	GRAB	04/20/2004 09:00
04042715	SW2	SW2	Surface Water	GRAB	04/20/2004 09:10
04042716	SW3	SW3	Surface Water	GRAB	04/20/2004 09:15
04042717	SW4	SW4	Surface Water	GRAB	04/20/2004 09:22
04042718	SW5	SW5	Surface Water	GRAB	04/20/2004 09:30
04042719	SW6	SW6	Surface Water	GRAB	04/20/2004 09:35
04042720	SW7	SW7	Surface Water	GRAB	04/20/2004 09:40
04042721	SW7D	SW7D	Surface Water	GRAB	04/20/2004 09:40
04042722	SW8	SW8	Surface Water	GRAB	04/20/2004 09:50
04042723	SW9	SW9	Surface Water	GRAB	04/20/2004 10:05

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U.S. EPA REGION III ANALYTICAL SERVICES & QUALITY ASSURANCE BRANCH

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SITE NAME : NEW RIVER AMMUNITION STORAGE

LAB REQUEST #: REQ04121

TESTS REQUESTED

INORGANICS

040427

	13	14	15	16	17	18	19	20	21	22	23
Perchlorate by IC	X	X	X	X	X	X	X	X	X	X	X

(X = Test Requested)

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USEPA Region III
Analytical Services & Quality Assurance Branch

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SITE NAME: NEW RIVER AMMUNITION STORAGE
LAB REQUEST #: REQ04121

QUALIFIER CODE AND GLOSSARY DEFINITIONS

Qualifier Codes Applied to Sample Results (NOTE: for organic analyses only detected target compounds are reported)

B Not detected substantially above (10 times) the level reported in the laboratory or field blanks (includes field, trip, rinsate, and equipment blanks).
C See report narrative for analyst's comments and observations concerning this result.
E Value exceeds a theoretically greater value (e.g., dissolved>total, orthophosphate>total phosphorus). However, the difference is within the expected precision of the analytical techniques and is not statistically significant.
J The identification of the analyte is acceptable; the reported value is an estimate.
K The identification of the analyte is acceptable; the reported value may be biased high. The actual value is expected to be less than the reported value.
L The identification of the analyte is acceptable; the reported value may be biased low. The actual value is expected to be greater than the reported value.
N There is presumptive evidence that the analyte is present; the analyte is reported as a tentative identification.
NJ There is presumptive evidence that the analyte is present; the analyte is reported as a tentative identification. The reported value is an estimate.
NA Not analyzed - analysis not performed.
NR Not requested - analysis not requested.
R The presence or absence of the analyte can not be determined from the data due to severe quality control problems. The data are rejected and considered unusable.
T Tentatively Identified Compound. Identified as a result of a library search using the EPA/NIST Mass Spectral Library. Standards were not used to verify the identity and quantity of the compound. The reported value is an estimate.
U The analyte was not detected at or above the reporting limit.
UJ The analyte was not detected at or above the reporting limit. The reporting limit is an estimate.
UL The analyte was not detected. The reporting limit is probably higher due to indications of a low bias.
< Less than.

Qualifier Codes Applied to Quality Control Results

A Quality control value is outside acceptance limits.
D Sample and/or laboratory duplicate values are below the reporting limit. No precision data reported.
TD Spike recovery too dilute for accurate quantitation.

Qualifier Codes Applied to Microbiology Results

< Less than.
<= Less than or equal to.
>= Greater than or equal to.
> Greater than.

Glossary:

() Numbers in parentheses are analytical spike recoveries (e.g., post-digestion spikes).
[] Numbers in brackets are matrix spike recoveries (e.g., pre-digestion spikes).
CFU Colony Forming Unit.
ISF A prepared sample aliquot fortified with a known concentration of target analyte(s) or a representative subset of target analytes and analyzed. Its purpose is to determine whether the sample matrix contributes bias to the analytical results.
LSF A sample aliquot fortified with a known concentration of analyte(s) or a representative subset of target analytes and carried throughout the entire lab method. It is analyzed to determine whether the sample matrix contributes bias to the analytical results.
MS/MSD Matrix spike/matrix spike duplicate; a known increment of target analyte added to a sample before preparation or analyses.
MSA Value obtained by Method of Standard Additions in which calibration standards are prepared in the sample matrix (see EPA method 200.9).
RPD Relative Percent Difference (RPD) is used to measure precision when duplicates are analyzed.
%Rec Percent Recovery (%Rec) is an expression of accuracy.

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SITE NAME : NEW RIVER AMMUNITION STORAGE

LAB REQUEST #: REQ04121

INORGANIC ANALYTICAL SAMPLE RESULTS

SAMPLE NUMBER:	04042713	04042714	04042715	04042716	04042717
STATION ID:	RB	SW1	SW2	SW3	SW4
	RINSATE	SAMPLE	SAMPLE	SAMPLE	SAMPLE

Perchlorate by IC

Perchlorate	<1.00 ug/L	<1.00 ug/L	<1.00 ug/L	<1.00 ug/L	<1.00 ug/L
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SITE NAME : NEW RIVER AMMUNITION STORAGE

LAB REQUEST #: REQ04121

INORGANIC ANALYTICAL SAMPLE RESULTS

SAMPLE NUMBER:	04042718	04042719	04042720	04042721	04042722
STATION ID:	SW5	SW6	SW7	SW7D	SW8
	SAMPLE	SAMPLE	SAMPLE	FIELD DUPLICATE	SAMPLE

Perchlorate by IC

Perchlorate	<1.00 ug/L	<1.00 ug/L	<1.00 ug/L	<1.00 ug/L	<1.00 ug/L
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SITE NAME : NEW RIVER AMMUNITION STORAGE

LAB REQUEST #: REQ04121

INORGANIC ANALYTICAL SAMPLE RESULTS

SAMPLE NUMBER: 04042723

STATION ID: SW9

SAMPLE

Perchlorate by IC

Perchlorate <1.00 ug/L

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SITE NAME: NEW RIVER AMMUNITION
STORAGE

LAB REQUEST #: REQ04121

INORGANIC QUALITY CONTROL RESULTS

SAMPLE NUMBER:	04042718	04042723
STATION ID:	SW5	SW9

Units:	% REC	RPD	% REC	RPD
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Perchlorate by IC

Perchlorate	[92]	D	[92]	D
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[] = LSF
() = ISF

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Perchlorate Determination**Analyst:**

Ronald H. Altman
Chemist

Method:

The NEW RIVER AMMUNITION STORAGE water samples (REQ04121) were analyzed for Perchlorate using EPA Method 314.0¹ (Determination of Perchlorate in Drinking Water using Ion Chromatography). The water samples were filtered through a Gelman glass fiber filter Type A/E 47 mm. In addition, a laboratory reagent blank (LRB), laboratory fortified blank (LFB), laboratory fortified blank at the maximum conductivity threshold (LFB at MCT), a matrix duplicate (LD2) and a matrix spike (LSF) were also prepared and taken through the process.

¹ US EPA Method 314.0, Determination of Perchlorate in Drinking Water Using Ion Chromatography, Revision 1.0, November 1999


**USEPA Contract Laboratory Program
Generic Chain of Custody**
Reference Case

Client No: R31860

SDG No:

L

Date Shipped: 4/20/2004 Carrier Name: FedEx Airbill: 790615586646 Shipped to: EPA Office of Analytical Services 701 Mapes Road Fort Meade MD 20755 (410) 305-2625	Chain of Custody Record		Sampler Signature:	For Lab Use Only Lab Contract No: _____ Unit Price: _____ Transfer To: _____ Lab Contract No: _____ Unit Price: _____	
	Relinquished By	(Date / Time)	Received By		(Date / Time)
	1	4/24/04 1600			4/21/04 1000
	2	4/26/04 1600	Thomas Rost		4.27.04 1400
	3				
4					

SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		FOR LAB USE ONLY Sample Condition On Receipt
RB	Field QC/ John Fellingner	L/G	CIO4 (21)	362362 (Ice Only) (1)	RB	S: 4/20/2004	10:10	04042713
SW1	Surface Water/ John Fellingner	L/G	CIO4 (21)	362351 (Ice Only) (1)	SW1	S: 4/20/2004	9:00	14
SW2	Surface Water/ John Fellingner	L/G	CIO4 (21)	362352 (Ice Only) (1)	SW2	S: 4/20/2004	9:10	15
SW3	Surface Water/ John Fellingner	L/G	CIO4 (21)	362353 (Ice Only) (1)	SW3	S: 4/20/2004	9:15	16
SW4	Surface Water/ John Fellingner	L/G	CIO4 (21)	362354 (Ice Only) (1)	SW4	S: 4/20/2004	9:22	17
SW5	Surface Water/ John Fellingner	L/G	CIO4 (21)	362355 (Ice Only) (1)	SW5	S: 4/20/2004	9:30	18
SW6	Surface Water/ John Fellingner	L/G	CIO4 (21)	362356 (Ice Only) (1)	SW6	S: 4/20/2004	9:35	19
SW7	Surface Water/ John Fellingner	L/G	CIO4 (21)	362357 (Ice Only) (1)	SW7	S: 4/20/2004	9:40	20
SW7D	Surface Water/ John Fellingner	L/G	CIO4 (21)	362358 (Ice Only) (1)	SW7D	S: 4/20/2004	9:40	21
SW8	Surface Water/ John Fellingner	L/G	CIO4 (21)	362359 (Ice Only) (1)	SW8	S: 4/20/2004	9:50	22

Shipment for Case Complete? Y	Sample(s) to be used for laboratory QC: SW9	Additional Sampler Signature(s): 	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number:
Analysis Key: CIO4 = Perchlorate	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact? <input type="checkbox"/>	Shipment Iced? <input checked="" type="checkbox"/>

TR Number: 3-400903063-042004-0001

 PR provides preliminary results. Requests for preliminary results will increase analytical costs.
 Send Copy to: Sample Management Office, 2000 Edmund Halley Dr., Reston, VA. 20191-3400 Phone 703/264-9348 Fax 703/264-9222

LABORATORY COPY


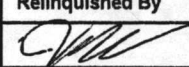
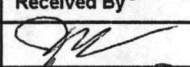
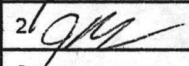
RB 040421 Cat 4.27.04 04121

**USEPA Contract Laboratory Program
Generic Chain of Custody****Reference Case**

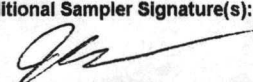
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	Relinquished By	(Date / Time)	Received By		(Date / Time)
		4/20/04 1600			4/21/04 1600
	2 	4/26/04 1600	Thomas Z...		4.27.04 1400
	3				
4					

SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	FOR LAB USE ONLY Sample Condition On Receipt
SW9	Surface Water/ John Fellingner	L/G	CIO4 (21)	362360 (Ice Only), 362361 (Ice Only) (2)	SW9	S: 4/20/2004 10:05	04042723

Shipment for Case Complete?Y	Sample(s) to be used for laboratory QC: SW9	Additional Sampler Signature(s): 	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number:
Analysis Key: CIO4 = Perchlorate	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact? <input type="checkbox"/>	Shipment Iced? <input checked="" type="checkbox"/>

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Attachment 2 - Hazard and Risk Exposure Data Sheet

Region III, Office of Analytical Services and Quality Assurances
Ft. Meade, Maryland

HAZARD AND RISK EXPOSURE DATA SHEET LEVELS OF PERSONAL PROTECTION DURING SAMPLING

BACKGROUND

Under the authority Section 104 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund) of 1980, Section 311 of the Clean Water Act, and Subtitle I of the Resource Conservation and Recovery Act (RCRA), EPA has been delegated the responsibility to undertake response actions with respect to the release or potential release of oil, petroleum, or hazardous substances that pose a substantial threat to human health or welfare, or the environment.

GENERAL

This form is to be used when collecting Environmental Samples (i.e. streams, farm ponds, wells, soils etc.) and for Hazardous Samples (i.e. drums, storage tanks, lagoons, leachates, hazardous waste sites). This information is intended for use as a guide for the safe handling of these laboratory samples in accordance with EPA and OSHA regulations. The sample classifications and levels of personal protection used by the sampler in all situations will enable the analyst to be better aware of potential exposure to substances in air, splashes of liquids, or other direct contact with material due to work being done.

DEGREE OF PROTECTION

- Level A: Highest level of respiratory, skin, and eye protection needed. Fully encapsulated suit, respirator self-contained (Tank type).
- Level B: Highest level of respiratory protection but lesser level of skin protection needed. Chemical suit, respirator self-contained (Tank type).
- Level C: Lesser level of respiratory protection than Level B. Skin protection criteria are similar to Level B. Chemical suit, canister respirator/cartridge.
- Level D: Work uniform without any respirator or skin hazards. Lab coat, gloves etc.

CLASSIFIED FIELD SAMPLES

X Environmental _____ Hazardous _____ Comb. (Env. & Haz.) _____ Radioactive _____

Site Name: Radford Army Ammunition Plant Sampling Date: 4-20-04

Sta No. SW1-SW9 _____, _____, _____, _____

Field pH: 7 _____, _____, _____, _____

(must be taken prior to submission of aqueous samples)

Sampler: John Fellingner Work Phone Number: 856.878.0988

Personal observations at time of sampling (surroundings): Field

Sample collection observations (physical sample, odors etc.): Surface water samples

Attachment 2 - Hazard and Risk Exposure Data Sheet

Region III, Office of Analytical Services and Quality Assurances
Ft. Meade, Maryland

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Personal observations at time of sampling (surroundings): Field

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From: Origin ID: (856)878-0988

(b) (4)
TECHLAW INC
14500 AVION PARKWAY
SUITE 300
CHANTILLY, VA 20151

FedEx
Express



CL5032404

Ship Date: 20APR04
Actual Wgt: 39 LB
System#: 5796320/INET1800
Account#: S *****

Dimmed: 24 X 12 X 12 IN

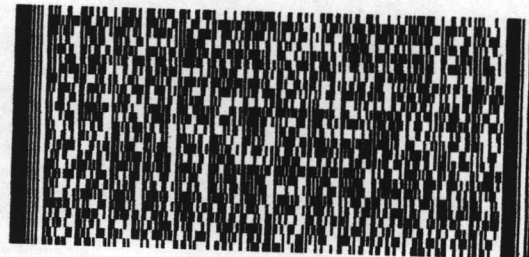
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Delivery Address Bar Code

SHIP TO: (410)305-2625 **BILL SENDER**
EPA Office of Analytical Servi
Attn: Carroll Harris
701 Mapes Road

Fort Meade, MD 20755



PRIORITY OVERNIGHT

TRK# 7906 1558 6646

FORM
0201

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21APR04

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